

## PRE FINAL EXAM

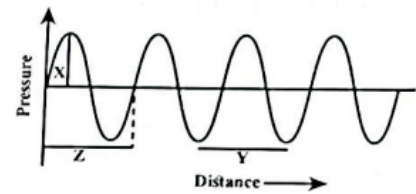
- Which of the following is true about the speed of light in different media?
  - Light travels fastest in water.
  - Light travels fastest in air.
  - Light travels fastest in a vacuum.
  - Light travels fastest in glass.
- When light passes from air into water, its speed changes. Which of the following best describes the effect of this change in speed?
  - The light bends away from the normal.
  - The light bends towards the normal.
  - The light speed increases.
  - The light remains unaffected.
- Which of the following phenomena occurs due to refraction of light?
  - A rainbow
  - The twinkling of stars
  - Formation of a shadow
  - Dispersion of light
- The angle of incidence is equal to the angle of reflection. This is a statement of which law?
  - Snell's Law
  - Law of Refraction
  - Law of Reflection
  - Law of Dispersion
- In a plane mirror, the image formed is:
  - Always virtual and of the same size as the object
  - Always real and of the same size as the object
  - Always real and smaller than the object
  - Always virtual and smaller than the object
- Why do we see a rainbow after a rain shower?
  - Due to reflection of light on water droplets.
  - Due to refraction and dispersion of light in water droplets.
  - Due to scattering of light by water droplets.
  - Due to absorption of light by water droplets.
- What type of mirror is used in a rear-view mirror of a vehicle?
  - Concave mirror
  - Convex mirror
  - Plane mirror
  - None of the above
- What happens when two objects with the same charge are brought close to each other?
  - They attract each other
  - They repel each other
  - They don't interact
  - They neutralize each other
- What is the SI unit of resistance?
  - Ampere
  - Volt
  - Ohm
  - Watt
- If the resistance of a wire is increased, what happens to the current?
  - The current increases
  - The current decreases
  - The current remains the same
  - The current becomes zero
- What is the SI unit of electric power?
  - Ampere
  - Volt
  - Watt
  - Ohm
- A 100-watt LED bulb was used for 12 hours. The cost of electricity is Rs 2.50 per unit. Calculate the cost of electricity consumption.
  - Rs 5
  - Rs 7
  - Rs 3
  - Rs 6

13. A 500-watt fan was used for 8 hours. The cost of electricity is Rs 3 per unit. Calculate the cost of electricity consumption.

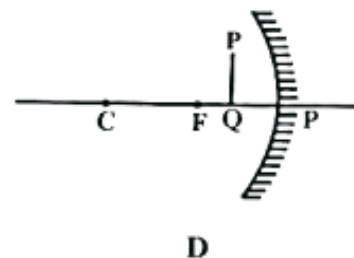
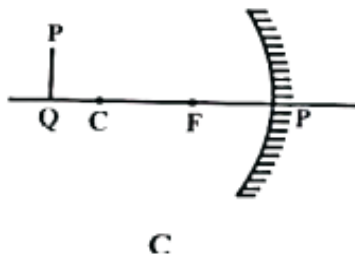
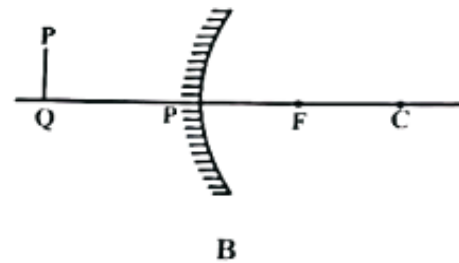
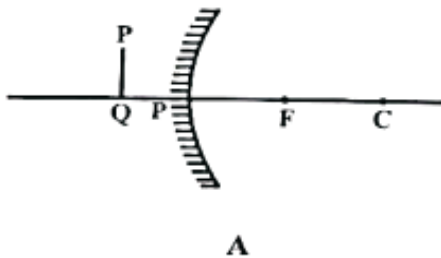
- a)Rs 12      b) Rs 14      c)Rs 10      d)Rs 18

14. What does Y represent in the given sound wave

- a) amplitude   b) Oscillation      c) wavelength      d) time period



15) **In which case a real image of the object PQ will be formed?**



16. Which medium does sound travel fastest in?

- a) Air      b) Water      c) Vacuum      d) Solid

17. The speed of sound is affected by:

- a) Temperature of the medium      b) Size of the sound source  
c) Color of the medium      d) Size of the receiver

18. Which of the following is true about sound waves?

- a) They are transverse waves      b) They are electromagnetic waves  
c) They are longitudinal waves      d) They do not need a medium to travel

19. The pitch of a sound increases when:

- a) The amplitude of the sound increases      b) The frequency of the sound decreases  
c) The frequency of the sound increases      d) The sound waves move through a denser medium

20. When sound waves travel through a medium, they cause:

- a) Vibrations of the medium particles      b) Rotation of the medium particles  
c) Movement of the medium particles at high speed      d) No change in the medium

## Section B

### Attempt ALL Questions

44 marks

Q 21. Which part of the electrical appliances are earthed and why?

Q 22. An electric bulb is rated 100 W-250 V. What does this mean?

Q 23. A lady received a shock when she happened to touch an electric kettle even though the switch was off.

- a) State the possible reasons for the shock
- b) Point out the possible defect with the electric wiring inside the kitchen.

Q.24. Write the precautions that should be taken while working with any electrical appliances.

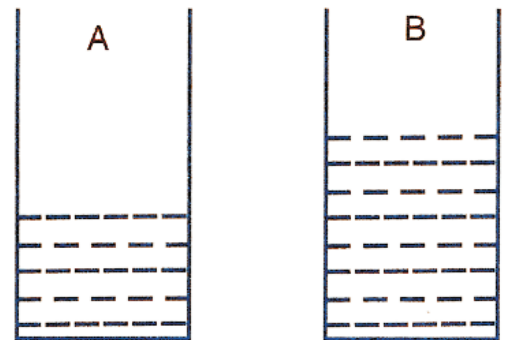
Q.25 Define the following

- a) Current
- b) Voltage
- c) rating of an electrical appliance
- d) Electric power

Q26. If the amplitude of a wave is doubled, what will be the effect on its loudness?

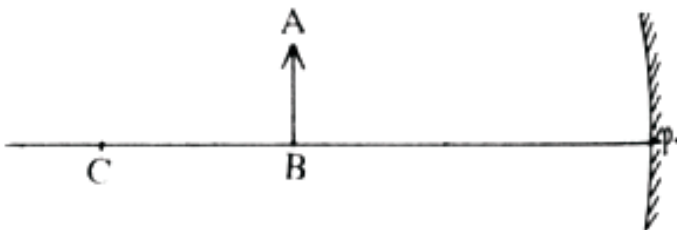
Q27. The frequencies of notes given by flute, guitar and trumpet are respectively 400 Hz, 200 Hz and 500 Hz. Which one of these has the highest pitch?

Q28. Figure shows two jars A and B containing water up to different heights. Which will produce sound of higher pitch when air is blown in them?



29.

Copy the figure. By taking two rays from point A, show the formation of image. State four characteristics of image.



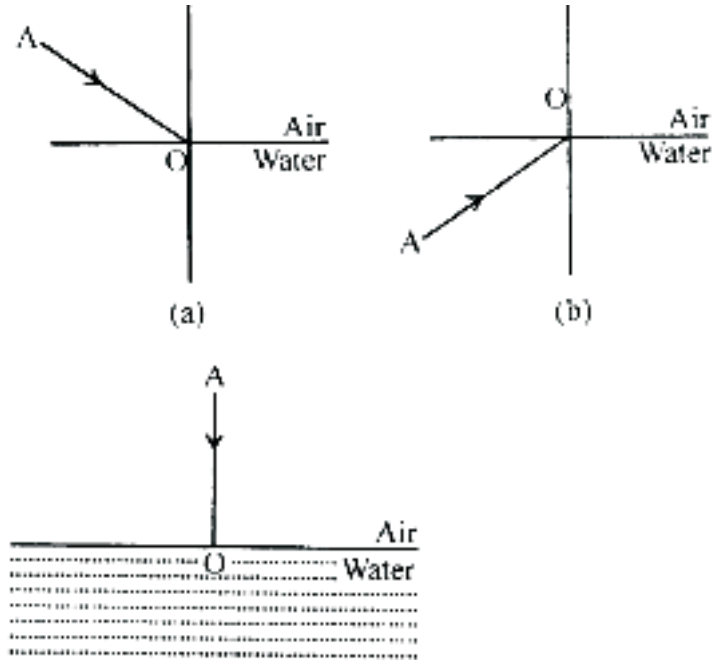
30. Compare the characteristics of an image formed by a convex mirror and a concave mirror, when object is beyond centre of curvature, but not at infinity in case of concave mirror and in between pole and infinity in case of convex mirror.

## Section C

16 marks

### Attempt ALL Questions

31. The diagram given below in fig shows a ray of light AO falling on a surface separating two media. Draw the refracted ray in each, case.

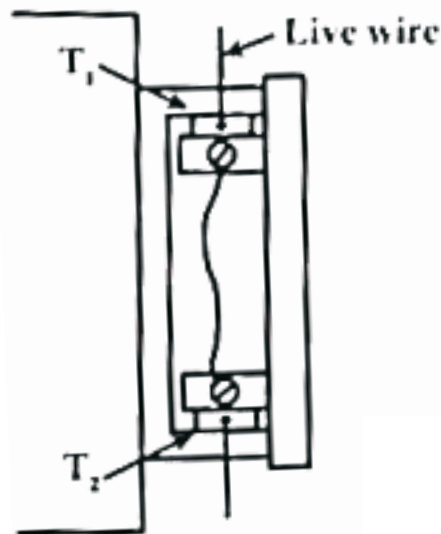


Q32. Give reason for the following

- (i) A coin placed at the bottom of the vessel appears to be raised when water is poured in the vessel.
- (ii) Sound does not travel through a solid steel door as easily as it travels through a hollow wooden door
- (iii) We hear thunder after seeing lightning
- (iv) we hear an echo when we shout in an empty hall or a large open space.

Q33.

- (i) Name this device.
- (ii) Write its functions
- (iii) How does this device work.



Q34.

- (i) What type of instrument is this?
- (ii) How sound is produced in this?
- (iii) Write 2 conditions for producing high pitch sound.



## ANSWERS TO PHYSICS ICSE 8 PAPER

1. c) Light travels fastest in a vacuum.
2. b) The light bends towards the normal.
3. b) The twinkling of stars
4. c) Law of Reflection
5. a) Always virtual and of the same size as the object
6. b) Due to refraction and dispersion of light in water droplets.
7. b) Convex mirror
8. b) They repel each other
9. c) Ohm
10. b) The current decreases
11. c) Watt
12. d) Rs 6
13. a) Rs 12
- 14.
- 15.
16. d) Solid
17. a) Temperature of the medium
18. c) They are longitudinal waves
19. c) The frequency of the sound increases
20. a) Vibrations of the medium particles

21. Which part of the electrical appliances are earthed and why?

Answer:

The metallic body of electrical appliances is earthed to prevent electric shock. If there is a fault in the appliance, such as a live wire coming into contact with the metal body, the earth connection allows the current to pass safely to the ground, protecting the user from electric shock.

22. An electric bulb is rated 100 W-250V. What does this mean?

Answer:

The rating 100 W-250V means that the bulb uses 100 watts of power when connected to a 250-volt supply. This helps in determining the bulb's energy consumption and the required voltage for it to operate efficiently.

23. A lady received a shock when she happened to touch an electric kettle even though the switch was off.

a) State the possible reasons for the shock

Answer:

The shock could be due to leakage of current or faulty insulation inside the kettle. Even though the switch was off, there could be a small current flowing through the appliance due to a wiring issue.

b) Point out the possible defect with the electric wiring inside the kitchen.

Answer:

The defect could be that the earth connection is not working properly, or there could be a faulty or damaged wire inside the kettle, allowing current to flow even when the switch is off.

24. Write the precautions that should be taken while working with any electrical appliances.

Answer:

- Switch off the appliance before handling it.
- Ensure proper earthing of the appliance to prevent electric shock.
- Use insulated tools and wear rubber-soled shoes while working with electrical appliances.
- Check for damaged wires and replace them immediately.
- Keep water away from electrical appliances to prevent short circuits or shocks.
- Avoid overloading electrical outlets to prevent overheating and fire hazards.

25. Define the following:

a) Current

Answer:

Electric current is the flow of electric charge (usually electrons) through a conductor. Its unit is Ampere (A).

b) Voltage

Answer:

Voltage, or electric potential difference, is the difference in electric potential energy per unit charge between two points in a circuit. Its unit is Volt (V).

c) Rating of an electrical appliance

Answer:

The rating of an electrical appliance indicates its **power consumption** (in watts) and the voltage it operates on. For example, a 100W-250V rating means it consumes 100 watts of power at a voltage of 250 volts.

d) Electric power

Answer:

Electric power is the rate at which electrical energy is consumed or produced by an appliance. It is calculated using the formula:

$$\text{Power (P)} = \text{Voltage (V)} \times \text{Current (I)}$$

The unit of electric power is Watt (W).

-26. If the amplitude of a wave is doubled, what will be the effect on its loudness?

Answer:

When the amplitude of a wave is doubled, the loudness of the sound increases by 4 times. Loudness is directly proportional to the square of the amplitude.

27. The frequencies of notes given by flute, guitar, and trumpet are respectively 400 Hz, 200 Hz, and 500 Hz. Which one of these has the highest pitch?

**Answer:**  
 The trumpet with a frequency of 500 Hz has the highest pitch because higher frequency sounds have higher pitches.

**Answer 28**  
 Jar B will produce sound of higher pitch when air is blown in it because jar B has less air column above water. Frequency of sound produced increases with decrease in the length of air column. Pitch or shrillness of sound increases with increase in frequency of sound.

**Q30. Concave Mirror (Object Beyond Centre of Curvature but Not at Infinity):\*\***

- Image Type: Real, Inverted, and Diminished
- Position: Between the focus (F) and the centre of curvature (C)
- Size: Smaller than the actual object
- Orientation: Inverted (upside down)
- Nature: Real (can be projected on a screen)
- Formation: The image is formed at a point beyond the centre of curvature (C), closer to the focal point (F). The image size is reduced compared to the object.

**Convex Mirror (Object in Between Pole and Infinity):**

- Image Type: Virtual, Upright, and Diminished
- Position: Behind the mirror (in between the mirror's pole and focus point)
- Size: Smaller than the actual object
- Orientation: Upright (same orientation as the object)
- Nature: Virtual (cannot be projected on a screen)
- Formation: The image is always formed behind the mirror, irrespective of the object's position, and it is diminished (smaller than the object).

Characteristic	Concave Mirror (Object beyond C)	Convex Mirror (Object between P and infinity)
Type of Image	Real, Inverted, Diminished	Virtual, Upright, Diminished
Position of Image	Between F and C	Behind the mirror
Size of Image	Smaller than the object	Smaller than the object
Orientation of Image	Inverted	Upright
Nature of Image	Can be projected on a screen	Cannot be projected on a screen

## PRE FINAL EXAM

1. What is a reversible change?
  - a) A change that cannot be reversed.
  - b) A change that can be reversed by changing the conditions.
  - c) A change that occurs gradually.
  - d) A change that happens once and cannot be undone.
2. Which of the following is a reversible change?
  - a) Burning of paper
  - b) Vaporization of water
  - c) Rusting of iron
  - d) Digestion of food
3. What is an irreversible change?
  - a) A change that can be undone
  - b) A change that cannot be undone by changing the conditions
  - c) A change that takes place slowly
  - d) A change that is always beneficial
4. Which of the following is an irreversible change?
  - a) Melting of ice
  - b) Freezing of water
  - c) Growth of a plant
  - d) Dissolving of salt in water
5. What is a periodic change?
  - a) A change that repeats after a fixed period of time
  - b) A change that happens only once
  - c) A change that occurs unpredictably
  - d) A change that never happens
6. Is rusting a periodic change?
  - a) Yes, rusting repeats in fixed intervals.
  - b) No, rusting is not a periodic change.
  - c) Yes, rusting happens every year.
  - d) No, rusting never happens.
7. Atoms of the same element with the same atomic number but different mass numbers are known as:
  - a) Isotopes
  - b) Isobars
  - c) Isotones
  - d) Allotropes
8. Is the swinging of a pendulum a nonperiodic change?
  - a) Yes
  - b) No
  - c) Sometimes
  - d) It depends on the conditions
9. Which of the following is an undesirable change?
  - a) Digestion of food
  - b) The spoiling of food
  - c) The growth of plants
  - d) The decay of a dead animal in open air



10. Is rusting a physical change?

- a) Yes, it is a physical change.
- b) No, rusting is a chemical change.
- c) Yes, rusting can be reversed.
- d) No, rusting can be undone by simple physical methods.

11. What is a displacement reaction?

- a) A reaction where two or more substances combine
- b) A reaction where an element displaces another element
- c) A reaction where heat or light is absorbed
- d) A reaction where an acid reacts with a base

12. What is a double displacement reaction?

- a) A reaction where one substance breaks down into simpler substances
- b) A reaction where an element replaces another element
- c) A reaction where positive and negative radicals of two reactants are exchanged
- d) A reaction where heat or light is absorbed

13. Protons and neutrons present in the nucleus are known as:

- a) Electrons
- b) Nucleons
- c) Neutrons
- d) Isotopes

14. Which of the following oxides is an example of a simple oxide?

- a) H<sub>2</sub>O
- b) N<sub>2</sub>O
- c) NO
- d) All of the above

15. Which of the following is an exothermic reaction?

- a) Photosynthesis
- b) Respiration
- c) Photosynthesis and Respiration both
- d) Neither

16. What happens when carbon dioxide is passed through lime water?

- a) Lime water turns milky
- b) Lime water turns colorless
- c) Lime water becomes hot
- d) Lime water becomes solid

17. In combined state, carbon occurs as

- (i) coal
- (ii) diamond
- (iii) graphite
- (iv) ALL of these

18. A crystalline form of carbon is

- (i) lampblack
- (ii) gas carbon
- (iii) sugar
- (iv) fullerene

19. Why is wood charcoal a bad conductor of heat and electricity?

- a) It is a good insulator
- b) It has high thermal conductivity
- c) It is made of metal
- d) It is a good conductor of electricity

20. What is formed when charcoal is burnt in a limited supply of air?

- a) Carbon dioxide
- b) Charcoa
- lc) Carbon monoxide
- d) Ash

## Section B

### Attempt ALL Questions

**Q21. Define:**

- (a) Matter
- (b) Intermolecular forces of attraction

**Q22. Give a reason why -**

- (a) Freezing of water is a reversible change while burning of a candle an irreversible change.
- (b) Change of seasons is a periodic change while change of weather is a non-periodic change.

**Q23. Fill in the blanks:**

- (a) The change of a solid into a liquid is called .....
- (b) The process in which a solid directly changes into gas is called .....
- (c) The change of water vapour into water is called .....
- (d) The temperature at which a liquid starts changing into its vapour state is .....

**Q24.**

Potassium chloride is added to water and stirred. A salt solution is obtained which is then boiled leaving behind a residue

- (a) Is the above change physical or chemical?
- (b) Name the residue which remains behind after the salt solution is boiled.
- (c) Is the change reversible or not reversible?
- (d) Are the composition and properties of the original substance altered.
- (e) Give a reason why the above experimentation would not be possible, if calcium carbonate is taken, in place of potassium chloride.

25. **Complete the equations.**

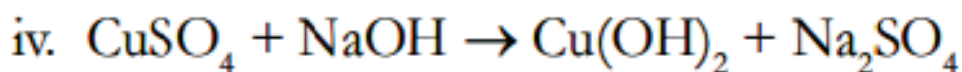
1.  $\text{Fe} + \text{CuSO}_4 \rightarrow \text{_____} + \text{_____}$
2.  $\text{NH}_3 + \text{HCl} \rightarrow \text{_____}$
3.  $2\text{Na} + \text{_____} \rightarrow 2\text{NaCl} + \text{H}_2$
4.  $\text{_____} + \text{_____} \rightarrow 2\text{NaCl} + \text{BaSO}_4 \downarrow$
5.  $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{_____} + \text{_____}$

**26. What happens in the following cases? Write balanced equations for the reactions (if any).**

1. Iron reacts with oxygen in the presence of moisture
2. Copper reacts with concentrated nitric acid
3. Calcium oxide is dissolved in water
4. Hydrogen peroxide is heated

27. **Identify the type of the reactions and balance them where necessary.**

- i.  $\text{CuSO}_4 + \text{H}_2\text{S} \rightarrow \text{CuS} + \text{H}_2\text{SO}_4$
- ii.  $\text{SO}_2 + \text{KOH} \rightarrow \text{K}_2\text{SO}_3 + \text{H}_2\text{O}$
- iii.  $\text{Mg} + \text{FeSO}_4 \rightarrow \text{MgSO}_4 + \text{Fe}$



28. Name the following.

1. The allotrope of carbon used in making lead pencils.
2. The term used for substances which have low ignition temperatures and catch fire easily.
3. The type of fire extinguisher used for fighting electrical and oil fires.
4. The organic compound mixed with LPG so that its smell can be detected in case of leakage.

29. Give one example for each of the following types of mixtures.

- (a) solid-solid homogeneous mixture
- (b) solid-liquid heterogeneous mixture
- (c) miscible liquids
- (d) liquid-gas homogeneous mixture

30. Name two substances in which carbon occurs in:

- (i) solid state
- (ii) liquid state

16 marks

## Section C

### Attempt ALL Questions

31. Suggest a suitable technique to separate the constituents of the following mixtures. Also give the reason for selecting the particular method.

- (a) Salt from sea water
- (b) Ammonium chloride from sand
- (c) Chalk powder from water
- (d) Iron from sulphur

32. Write the following metals in the order of their reactivity, from most reactive to least reactive. [4 MARKS]  
gold, aluminium, tin, lead, copper, sodium, magnesium, calcium, zinc, silver, aluminium

33

- (I) . (a) Define physical change.
- (b) State four characteristics of a physical change.
- (c) Give four examples of physical changes.

(II) . Write balanced chemical equations for the following word equations:

1. Iron + Chlorine  $\rightarrow$  Iron(III) chloride
2. Magnesium + dil. sulphuric acid  $\rightarrow$  Magnesium sulphate + hydrogen
3. Magnesium + oxygen  $\rightarrow$  Magnesium oxide
4. Calcium oxide + water  $\rightarrow$  Calcium hydroxide
5. Sodium + Chlorine  $\rightarrow$  Sodium chloride

1. b)
2. b)
3. b)
4. c)
5. a)
6. b)
7. a)
8. b)
9. b)
10. b)
11. b)
12. c)
13. b)
14. d)
15. b)
16. a)
17. (iv)
18. (iv)
19. a)
20. c)

Q21. Define:

(a) Matter:

Matter is anything that has mass and occupies space. It is made up of particles (atoms or molecules) and exists in different states such as solid, liquid, and gas.

(b) **Intermolecular forces of attraction**:

Intermolecular forces of attraction are the forces that hold molecules together in a substance. These forces are responsible for determining the physical properties of substances, such as boiling point, melting point, and solubility.

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### **Q22. Give a reason why:**

(a) **Freezing of water is a reversible change while burning of a candle is an irreversible change**:

Freezing of water is a physical change because it can be reversed by simply increasing the temperature (the water will melt back into liquid). Burning of a candle, however, is a chemical change because the wax undergoes combustion to form new substances (carbon dioxide and water), and this process cannot be reversed.

(b) **Change of seasons is a periodic change while change of weather is a non-periodic change**:

The change of seasons occurs at fixed, predictable intervals (such as every 3 months), making it periodic. On the other hand, the change of weather does not follow a fixed pattern and can happen unpredictably, so it is considered non-periodic.

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### **Q23. Fill in the blanks:**

(a) The change of a solid into a liquid is called **melting**.

(b) The process in which a solid directly changes into gas is called **sublimation**.

(c) The change of water vapour into water is called **condensation**.

(d) The temperature at which a liquid starts changing into its vapour state is **boiling point**.

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### **Q24. Potassium chloride is added to water and stirred. A salt solution is obtained which is then boiled, leaving behind a residue.**

because calcium carbonate (CaCO<sub>3</sub>) is insoluble in water. It would not dissolve in the water, and the solution would not form as it does with potassium chloride.

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## #Q26. What happens in the following cases? Write balanced equations for the reactions if (any). \* \*

1. Iron reacts with oxygen in the presence of moisture \* \*

When iron reacts with oxygen in the presence of moisture, it forms rust (iron oxide). The balanced chemical equation is:

$4\text{Fe} + 3\text{O}_2 + 6\text{H}_2\text{O} \rightarrow 4\text{Fe}(\text{OH})_3$  This is iron (II) hydroxide, which later dehydrates to form iron (II) oxide, commonly known as rust.

2. Copper reacts with concentrated nitric acid \* \*

When copper reacts with concentrated nitric acid, it forms copper nitrate, nitrogen dioxide (a brown gas) and water. The balanced chemical equation is:



3. Calcium oxide is dissolved in water \* \*

When calcium oxide (quicklime) reacts with water, it forms calcium hydroxide (slaked lime). The balanced chemical equation is:



4. Hydrogen peroxide is heated \* \*

When hydrogen peroxide is heated, it decomposes to form water and oxygen gas. The balanced chemical equation is:



- - -

Let me know if you need any further clarification!

## PRE FINAL EXAM

1. What is the long fiber that carries the nerve impulses?  
a) Dendrite b) Axon c) Myelin sheath d) Neurotransmitter
2. Which of the following is a bundle of axons?  
a) Axon terminal b) Nerve c) Synapse d) Cell body
3. What is the connection between adjacent neurons called?  
a) Myelin sheath b) Reflex c) Synapse d) Axon
4. Osmosis refers to:  
A) The movement of water through a semi-permeable membrane from high to low concentration.  
B) The movement of mineral ions from low to high concentration using energy.  
C) The movement of gases from one part of the plant to another.  
D) The absorption of sunlight in the leaves.
5. What is a rapid automatic response to a stimulus called?  
a) Reflex b) Response c) Nerve impulse d) Sense receptor
6. What is the covering of fatty material that speeds up the passage of nerve impulses?  
a) Axon b) Myelin sheath c) Dendrite d) Synapse
7. What is the structure at the end of an axon that produces neurotransmitters to transmit the nerve impulse across the synapse?  
a) Axon terminal b) Cell body c) Neurotransmitter d) Reflex
8. What are the high-speed signals that pass along the axons of nerve cells?  
a) Nerve impulse b) Reflex c) Sense receptor d) Dendrite
9. What are the branching filaments that conduct nerve impulses towards the cell?  
a) Axon b) Dendrite c) Synapse d) Myelin sheath
10. What is transpiration?  
A) The process of water movement from the roots to the leaves in plants.  
B) The movement of water through a semi-permeable membrane.  
C) The loss of water vapor from the aerial parts of the plant, mainly through stomata  
.D) The absorption of minerals by the roots.
11. Iodine is necessary for the synthesis of which hormone?  
a) Insulin b) Thyroxine c) Adrenaline d) Growth hormone
12. Which of the following is secreted by the thyroid gland?  
a) Insulin b) Thyroxine c) Adrenaline d) Cortisol
13. Which gland is also known as the "master gland"?  
a) Thyroid gland b) Pituitary gland c) Pancreas d) Adrenal gland
14. Which gland breaks down glycogen into glucose in the liver?  
a) Thyroid gland b) Pancreas c) Pituitary gland d) Adrenal gland
15. Over secretion of growth hormone results in which disorder?  
a) Dwarfism b) Gigantism c) Diabetes d) Hyperthyroidism

16. Which of the following diseases is caused by a virus?

- a) Tuberculosis b) Malaria c) Cholera d) All of these

17. Which of the following is NOT a viral disease?

- a) Measles b) Cholera c) Influenza d) Chickenpox

18. Which of the following is the food-conducting tissue in plants?

- A) Xylem B) Phloem C) Parenchyma D) Sclerenchyma

19. Which of the following is an example of a Kharif crop?

- a) Rice b) Wheat c) Maize d) Barley

20. Which of the following are unicellular, thin-walled outgrowths of roots?

- A) Root hairs B) Leaf stomata C) Xylem vessels D) Phloem sieve tubes

## Section B

44 marks

### Attempt ALL Questions

21.

- (i) Which diseases are caused by coming in direct contact with the infected person or its used articles ?  
(ii) What is the mode of transmission and causative agents of typhoid?  
(iii) Discuss the general methods of preventing diseases.  
(iv) How would you administer first aid to a person who has got burns ?

22. Relate the function of nutrient with the symptoms of disease on its deficiency.

Nutrient	Function	Deficiency Diseases
Calcium		
Iodine		
Vitamin A		
Vitamin C		

23.(A) Differentiate between food and cash crops.

(B) Name two diseases of cattle and poultry. How can animals be protected against diseases?

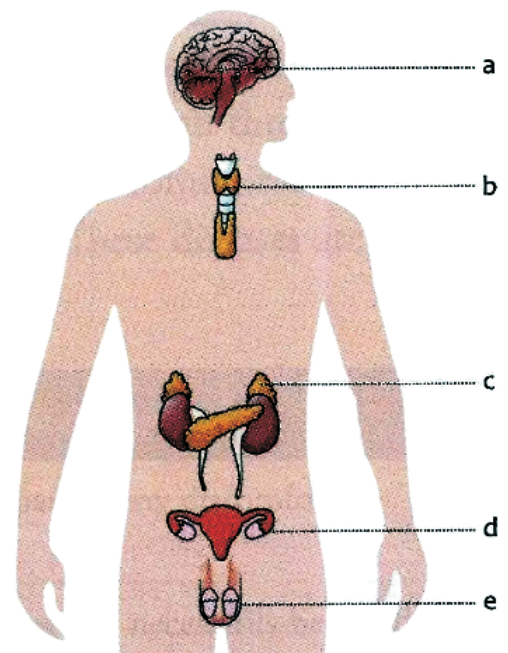
24. List four ways in which fungi help us.

25. Differentiate between (2 points each)

- (a) Endocrine and exocrine glands  
(b) Thyroxine and insulin

25. Write two functions of the pituitary gland in our body and two functions of the islets of Langerhans.

26. In the figure given alongside, label the glands marked a-e and name the hormones secreted by them.



27. Differentiate between (2 points each)

(i) sensory nerves and mixed nerves.

(ii) cerebrum and cerebellum

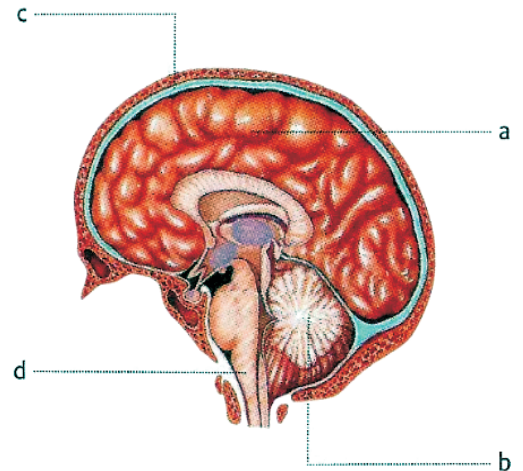
28. (i) Write two functions of the cerebrospinal fluid.

(ii) Name the parts of a nerve cell.

29. The diagram represents the external view of the human brain. Study it and then answer the questions that follow.

(i) Name the parts numbered a to d.

(ii) What is the main function of the parts numbered c and d?



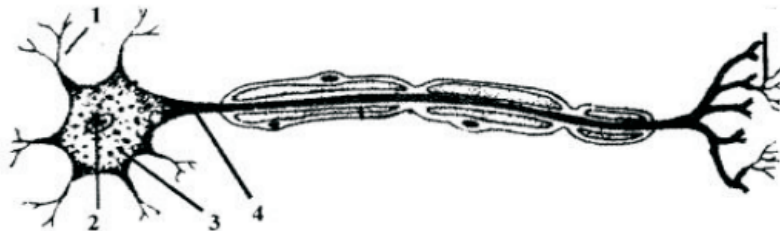
30. People who have had too much alcoholic drinks have problems in walking straight and driving. Which part of their brain has been affected? Give reason

## Section C

### Attempt ALL Questions

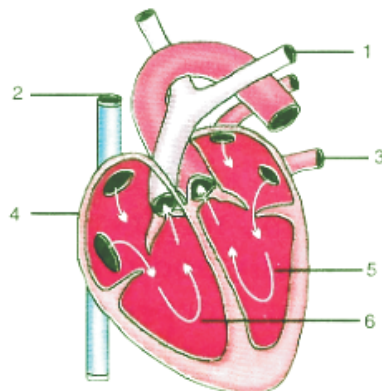
16 marks

31. Given below is the diagram of a neuron. Name the parts numbered 1-4.



32. State the various physical changes that occur during adolescence.

33. Given alongside is a diagram of the human heart showing its internal structure. Label the parts marked 1 to 6, and answer the following questions.



(a) Which type of blood is carried by the blood vessel marked 2?

(b) Name the main artery which takes the blood from heart to different parts of the body?

(c) Which chamber of the heart receives deoxygenated blood from the body?

34(a) Scavengers and decomposers are important for the environment. Why

(b) Write a short note on biotic components of the environment.



## PRE FINAL EXAM

1. The teacher asked if \_\_\_\_\_ had completed their homework.  
A. all B. much C. enough D. a lot
2. A large number of books \_\_\_\_\_ in the library, and each of them \_\_\_\_\_ in good condition.  
A. has, is B. has, are C. have, is D. have, are
3. Despite their friendly behavior, both the boys were becoming more \_\_\_\_\_ with each other.  
A. generous B. calm C. hostile D. caring
4. Riya managed to catch the bus in the nick of time. Which of the following means the same as the underlined phrase?  
A. Riya missed the bus by a moment. B. Riya caught the bus just in time.  
C. Riya arrived too late for the bus D. Riya was delayed and missed the bus.
5. The boy found a wallet. He returned it to its owner. He received a reward.  
Which of these options combines the sentences correctly?  
A. The boy returned the wallet he found and received a reward.  
B. Returning the wallet to its owner, the boy found a reward.  
C. The boy received a reward and found a wallet.  
D. After receiving a reward, the boy found and returned the wallet.
6. Sonia is not as brave a girl as she is thought to be. Which of the following means the same as the given sentence?  
A. Sonia is a braver girl than people think she is.  
B. Sonia is thought to be braver than she is.  
C. Sonia is braver than she is thought to be.  
D. Sonia is known to be the bravest of all girls.
7. A man stepped out of the elevator. He slipped on the wet floor. Which of the following sentences means the same as the given sentences?  
A. Stepping out of the elevator, the man slipped on the wet floor.  
B. A wet floor caused the man to step out of the elevator and slip.  
C. Slipping on the wet floor, a man stepped out of the elevator.  
D. The man slipped out of the elevator and stepped on the wet floor.
8. Which of these sentences is NOT correct?  
A. If he works harder, he might get promoted.  
B. Unless he works harder, he might get promoted.  
C. If he were to work harder, he would get promoted.  
D. Had he worked harder, he would have gotten promoted.

### Passage with Blanks (Questions 9–18):

The small village lay silent, nestled in the valley. Arjun walked slowly, weighed \_\_\_\_\_ (9) the harsh realities of life. His mind was clouded with thoughts of failure and \_\_\_\_\_ (10). The cold breeze brushed against his face as he gazed \_\_\_\_\_ (11) at the distant mountains. Memories of his \_\_\_\_\_ (12) days in the city flashed before him, bringing both joy and regret. \_\_\_\_\_ (13) by the struggles of life, he pondered on his future. The dreams \_\_\_\_\_ (14) that once ignited his passion now felt distant. Though \_\_\_\_\_ (15) by fear, Arjun resolved to stand firm. A glimmer of hope began to \_\_\_\_\_ (16) in his heart, gradually replacing his despair. With this hope, he decided to face \_\_\_\_\_ (17) and rebuild his life \_\_\_\_\_ (18).

9. A. over B. about C. by D. from  
 10. A. confusion B. rejection C. hesitation D. affection  
 11. A. fixedly B. fixed C. fix D. fixture  
 12. A. brightest B. brighter C. bright D. brightly  
 13. A. intimidated B. inspired C. shaken D. confused  
 14. A. ambition B. passion C. motivation D. hesitation  
 15. A. discouraged B. terrified C. motivated D. encouraged  
 16. A. evaporate B. emerge C. vanish D. subside  
 17. A. challenges B. past C. struggles D. memories  
 18. A. strongly B. with courage C. head-on D. determined

### THE LOST INVITATION

This is an account of a lesson learned by Priya, who found herself in an embarrassing yet memorable situation.

Priya was thrilled when she received an invitation to the Governor's banquet. It was an event where several dignitaries were expected to attend. She spent weeks planning her attire and rehearsing polite conversations.

On the evening of the event, dressed in her best, she hailed a cab. As she reached the venue, her heart sank. She couldn't find her invitation card. It must have slipped out of her bag on the way!

The guard at the entrance was polite but firm. "Ma'am, I need the card to let you in," he said.

Priya's first instinct was to argue, but she remembered her mother's advice: "Stay calm; anger solves nothing." Instead, she explained her situation patiently.

Luckily, the banquet coordinator was nearby. After verifying her name on the guest list, he allowed her entry. Inside, Priya narrated the incident to the Governor, who chuckled and said, "You're the first guest to lose an invitation but gain a great story!"

Later, Priya reflected on how keeping her composure helped her resolve the issue. She realized that, sometimes, staying calm under pressure is the best solution.---

19. "Priya was thrilled when she received an invitation to the Governor's banquet." What does the word "thrilled" mean in this context?

- A. Anxious B. Excited C. Nervous D. Confused--

20. What was the significance of the event for Priya?

- A. She wanted to make new friends. B. It was her first time attending a Governor's banquet.  
 C. She had been invited to speak at the event. D. She was hoping to meet her relatives there.---

21. What was Priya's initial reaction when she couldn't find her invitation card?

- A. To burst into tears. B. To argue with the guard  
 .C. To remain calm and explain. D. To leave the venue immediately.---

22. What was the MOST LIKELY impression the Governor had about Priya?

- A. That she was resourceful and composed .B. That she was careless and forgetful.  
 C. That she was an important guest. D. That she was unprepared and rude.---

23. Which of these proverbs BEST suits the events of the passage?

- A. Honesty is the best policy. B. Every cloud has a silver lining.  
 C. Practice makes perfect. D. A stitch in time saves nine.

24. Which of these emotions does the story bring out?

- A. love and loathing B. honesty and integrity C. kindness and gratitude D. forgiveness and composure

## THE ISOLATED TRIBE

In 1872, an explorer named Jonathan Carter stumbled upon an uncharted island in the Pacific. He described its inhabitants as "a people deeply connected to nature, speaking a language unlike any other."

The island, later named Solitude Island, remained untouched by modern civilization for centuries. Thick forests, rocky terrain, and dangerous tides made it nearly impossible for outsiders to access the island. The indigenous people, known as the Solutans, lived a life of complete self-sufficiency.

In 1945, during World War II, a small group of soldiers accidentally landed on the island. To their surprise, they found that the Solutans cultivated their own crops, hunted animals, and built shelters from natural materials. They also had tools made of stone and bone, suggesting an ancient way of life.

However, contact with the outside world had devastating consequences. Several Solutans fell ill after consuming food left behind by the soldiers. Realizing the harm caused by outsiders, the Solutans retreated further inland and became increasingly wary of visitors.

Today, the authorities face a dilemma: Should they protect the Solutans' way of life by keeping outsiders away, or should they introduce them to modern advancements? For many, the Solutans represent a symbol of humanity's untouched and unpolluted past.

30. What did Jonathan Carter discover in 1872? How did he describe the people he found? What does this reveal about his attitudes toward indigenous cultures?
31. Give four main reasons why Solitude Island remained isolated for centuries.
32. Who named the island Solitude, and why? Name any two key features of the island observed by outsiders during World War II.
33. What is the dilemma faced by authorities regarding the Solutans? Why is this dilemma significant? What does the term "symbol of humanity's past" mean in the context of the passage?
34. In about 50 words, explain how the Solutans are independent, self-sufficient, and protective of their way of life.
- 35 (A). Write about an experience where you helped a stranger in need. (300–350 words)
  - (a) Describe your initial hesitation and feelings during the situation.
  - (b) Explain what you did to help the person.
  - (c) Reflect on how the experience changed your perspective.

OR

- (B) . Write about a memorable journey you went on with your family. (300–350 words)
  - (a) Describe the destination and your excitement before the trip.
  - (b) Narrate an interesting or challenging moment during the journey.
  - (c) Reflect on why this journey was special to you.

36.A. You volunteered at a community clean-up drive organized by your local municipal body. Write a letter to the editor of a local newspaper, describing the event and its impact on the community. Suggest ways to encourage more people to participate in such initiatives.

OR

B. Your best friend accidentally damaged a gift you received on your birthday. Write a letter to your friend expressing your feelings about the incident. Mention the sentimental value of the gift and suggest how the situation could be resolved without damaging your friendship.